AARC/OVER
Bulletin of Austin Amateur Radio Clubs
Austin Amateur Radio Club
Austin Amateur Television Club
Austin Repeater Organization
ISSN 1067-0262
February 1997 Issue 02-97

Club Meetings

Austin Repeater Organization
Tuesday, 7 January 1997, 7:30 pm.

Austin Amateur Radio Club
Tuesday, 14 January 1997, 7:30 pm.

Austin Amateur TV Club
Tuesday, 21 January 1997, 7:30 pm.

All these organizations meet at Luby's Cafeteria on North Loop, about a block west of Burnet Road. We meet in the back room about as far from the cash register as we can get. Visitors are welcome whether they are licensed hams or not.

Austin Repeater Organization January 1997 Minutes

The meeting was held on 7 January 1997 at Luby's Cafeteria, North Loop, Austin, TX. President Lansing Pugh, KK5VK, called the meeting to order at 7:36 pm.

Visitors and New Members

The organization welcomed visitor Norman Heir [KC5YJF]. There were no new members.

Minutes

A motion was approved to accept the minutes for the December 1996 meeting as submitted by Secretary Sam Mihalik [KB5TKF] and published in the January 1997 AARC/Over ARO Monitor.

Officer Reports

Treasury - Treasure Roger Wines [W5WIA] reported a balance of $5,634.93.

Technical Committee - Various members of the committee reported that the repeater equipment has been working effectively although not entirely without problems. The 146.94 repeater was reported as being periodically deaf and subject to occasional intermod interference from pager service transmissions. Milton Moller [KB5TKF] reported that the 9600 baud high speed packet repeater located in Oak Hill doesn't transmit error-free packets 100 percent of the time.

Old Business

President Pugh announced that the Board had appointed Hugo Sanchez [N5JGX] to be the Organization's Vice President.

New Business and Announcements

Jeff Schmidt [N5MNW] announced that Novice/Technician classed would begin on Saturday, March 22, 1997, at Murchison Middle School. Persons interested in participating should call (512) 255-6753.

Vice President Sanchez announced that the & am Saturday breakfast meetings had been moved from the international house of Pancakes to the Waterloo Ice House, 8600 Burnet Road. He also announced that one of his short term goals fro the organization was to provide volunteer communication support for the Capitol 10K race

Upcoming events announced at the meeting included the January ARES face-to-face meeting, the monthly transmitter hunt, ARRL examinations at Murchison Middle School, and swapfests in San Antonio, Arlington, Georgetown, and Bastrop. Joan Cox [KD4SRD] announced a January 12 HF exercise.

Club Information

Austin Amateur Radio Club, Inc.	P. O. Box 13473,	Austin, TX	78711-3473	
President	Gene Van Zelfden	KB5UGO	338-4729	adrian@zilker.net
Vice President	(Your Name Here?)			
Treasurer	Mickey McInnis	KB5YAC	339-0344	mcinnis@austin.ibm.com
Secretary	Morgan Palmer	KC5GPG		
Activity Manager	Joan Cox	KD4SRD		
Committees & Positions				
Technical	Ed Golla	K3AHS	255-4818	
ARRL Travis Co. Emergency Coord.	Mac Cannary	KB5VYT	339-9531	
ARRL Public Information Coordinator	Hal Henegar	W5MDL	836-2012	jcvp11a@prodigy.com
ARRL Public Information Officer	Robert Barron	KA5WSS	837-4051	barron@liant.com
ARRL Public Information Officer	Roger Wines	W5WIA	453-2193	
Austin Repeater Organization	P. O. Box 4763,	Austin, TX	78765	
President	Lansing Pugh	KK5VK	441-0508	lansing@acadlp.com
Vice President	Hugo Sanchez	N5JGX	459-7228	
Secretary	Sam Mihalik	KB5SML	282-6229	smihalik@fand.tdh.state.tx.us
Treasurer	Roger Wines	W5WIA	453-2193	
Editor	Lloyd Crawford	N5GDB	892-3912	lbcrawford@themall.net
Director	Juanthenia Kinney	KA5TXK		
Director	Nick Broline	W5FUA	929-4314	nick_broline@tracor.com
Director	Jeff Schmidt	N5MNW	255-6753	jeff_schmidt@email.spts.mot.com
Director	Keith Watson	WB9KHL	288-9709	watson@apple.com
Director	Fred Neuenschwander	W5FQR		

Please contact a club officer, attend a meeting, or mail us to join either organization.

The Austin Amateur Radio Club, Inc. Membership dues are $8.00 per calandar year ($10.00 for a family). Joint ARO/AARC dues are $15.oo per year.

AARC maintains a repeater with open autopatch and emergency power on 146.78 MHz and an emergency HF/VHF station at the American Red Cross Building. Persons Residing or working within the coverage area are expected to join the club if they use the autopatch. Non-residents on short visits are welcome to use the autopatch.

The Austin Repeater Organization dues are $8.00 per calandar year. Joint ARO/AARC dues are $15.00 per year. Family membersship is $10.00 per year.

ARO maintains the following repeaters: 146.88 MHz offset -600 kHz and has an phone patch; 146.94 MHz -600 kHz is used for the Weather Net at the request of the National Weather Service. It us used for the Swapnet and Newsline at 9 pm Sunday; 224.80 MHz -1.600 MHz; 444.10 MHz +5 MHz; and 145.01 MHz is the packed NetROM node, KB5PM-1 or aliaus AUS. Persons residing or working within the coverage area are expected to join the club if they use the auto-patch. Non-residents on short visits are welcome to use the autopatch. ARO maintains a TCP/IP gateway, ausgw.wb9khl.ampr.org on 145.670 MHz.

The 146.78 and 146.88 repeaters have open autopatches. Press * and dial the phone number to place a call. Do not unkey after the *. When finished, press # to hang up the phone. Dial "911" (no * needed) for emergency services. Please transmit your callsign **before** usint the phone patch.

AARC/Over Information

ISSN 1067-0262, CODEN AAOVE3.© Austin Amateur Radio Club, Inc. an/or the Austin Repeater Organization. Published monthly by the Austin Amateur Radio Club Inc.

Viewpoints expressed in the AARC/Over do not necessarily reflect those of any club, or of its members, directors, or officers.

Members and other readers are encouraged to submit material for publication. Mail to Lloyd Crawford at P. O. Box 91058, Austin, TX 78709-1058, or e-mail to lbcrawford@themall.net (Internet), or 892-3912 or FAX 892-5101. Submissions may be edited for format, style, and suitability. Deadline for the next issue is the Thursday following the AARC meeting. Material may be saved for later months. Unless otherwise noted, permission is granted to reprint AARC/Over articles provided that you credit the author and the AARC/Over.

Address Correction: Jim Neely WA5LHS jneely@eden.com or 604-3012

Program

Paul [KA6ATN] presented information about how to set up and access an internet web site. During the course of his presentation, he identified several web sites and servers of interest to amateur radio. These included **repeater.org**, **texltel.com**, **spring.com**, and **itouch.net**. President Pugh has set up an ARO web page on his own site, **acadlp.com**, where he lists local repeater frequencies and announcements of upcoming events.

Austin Amateur Radio Club January 1997 Minutes

Due to adverse weather conditions, the January meeting was cancelled.

In spite of the weather, the following members and guests gathered and had an enjoyable time anyway: Visitor John Wright, KC5ETB, from Greenville TX; W8LIQ; N5OUJ; KR4AH; K5EJL; KG5IG; KB5TKF; K5ZSI and wife Maxine; KC5UXO and wife; N5GDBand wife Ibbie.

Membership Renewals

Membership renewal forms will be mailed to you soon. Please don't send in your renewals until you receive the renewal form in order to make it easier to process and update the membership list. ***However, if the form does not have a place to enter an e-mail address (if you have one), please add any e-mail address to the form.***

Announcements/News

South Austin W5YI VE Team Session Report

The South Austin W5YI VE Team heartily congratulations all of the following people who earned new or upgraded amateur radio licenses at its 21 December 1966 session:

William C Carey, III, AC5KZ .....Extra Class
Alan M. Cohen, WA2DZL .....Extra Class
Thomas W. Lynch, KC5TNO .....Advanced Class
Thomas G. Stivers, KC5YIK .....Technician Plus
Lawrence W. Fuhs, KC5YJK .....Technician
Lawrence N. Herr, KC5YJP .....Technician
Jennifer S Lagmanson, KC5YJL .....Technician
Marcus M. Lagmanson, KC5YJN .....Technician
Daniel E Stivers, KC5YJO .....Technician
Ian A. Stokes, KC5YJM ..... Technician

Two others earned element credit without upgrading.

Our volunteer examiners were:

Hugh Brown, NT5O
Jeffrey Deines, Sr., KK5TO
Lloyd Goehring, Jr., N5HYR
Jim Greenwood, AB5EK
Christine Hindman, AC5IS
Emil Kasprzyk, K5JTP
Roger Pfluger, AC5IP
Sophia Tapley, N5JNE
Marion Williamson, AC5CM

Our fourth year of service to the amateur radio community is "in the books". We will begin our fifth year on 18 January 1997 at 2:00 pm in Room 109 of Fleck Hall on the campus of St. Edward's University. Our next session following is set for 22 February at the same place and time.

Note that the examination fee for all license examinations during 1997 will be $6.25. For more information, call Jim, AB5EK, at 327-6184.

Breakfast Groups, New Location

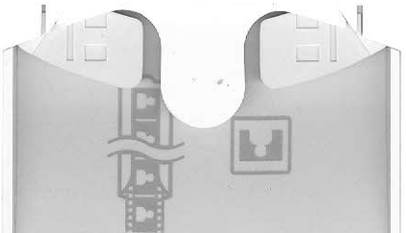
The breakfast group that formerly met at Simon David's is now meeting at the Waterloo Ice House, 8600 Burnet Road.Monitor 444.1

Another group gathers at Richard Jones Barbecue which is just past the Texico station at Westgate and Hwy 290. Monitor 147.36 (131.8 tone). The group gathers at 0730. Recently, the number of women has reached that of men, so bring your wife or sweetheart.

FREE RF Software Available for Download

Brian Beezely, K6STI, has made available a special edition of his AO Antenna Optimizer program to enable computation of electric and magnetic near fields from antennas as required by recent FCC regulations. You can download the 245K NF.ZIP file from **ftp://n6nd.nosc.mil** free of charge. System requirements are a 386 or better cpu, a math co-processor (mandatory), a VGA monitor, and DOS 3.0 or later. This software may be copied and distributed to others solely for amateur purposes. This free software is provided without support. You should read the notice of offer in CQ Magazine, November 1996 issue, page 68.

Although the FCC has delayed the effective date of this rule to 1 January 1998, now is the time to do the necessary computations, analyze the results, and forward comments to FCC and ARRL. Otherwise, we may have to comply with an unworkable standard and be at risk of legal action by neighbors.



FCC Delays Effective Date of RF Exposure Rules

Compliance with these new rf exposure rules has been delayed until 1 January 1998. These rules which affect any amateur station running 50 W PEP. They also affect all of us as to knowledge and as to several questions added to every examination. FCC plans to revise its existing publication, OET Bulletin No 65, *Evaluation Compliance with FCC Specified Guidelines for Human Exposure to Radio Frequency Radiation.* Interested amateurs can download the entire text of FCC Report DC 96-112 from the ARRL Web site at http://www.arrl.org/fcc/dc96-112.html (or click on "What's New on RF Safety News").

We, as amateurs, should begin our preparation for these requirements by reading or re-reading the following items in QST. The January article provides most of the detail.

QST, February 1997, FCC Delays New RF-Exposure Rules, p. 78.

QST, January 1997, The FCC's New RF-Exposure Regulations, pp 47-49.

Swapfests for 1997

25 January	UT Arlington
01	Amarillo?
02 February	Georgetown, Sunday afternoon
15 February	Smithville
15-16 March	Midland
19 April	Belton
??	Manchaca
?? August	Austin Summerfest
1-2 November	Odessa

Novice/No-Code Technician Class Schedule and Syllabus:

Jeff Schmidt, N5MNW, provides the following information about Novice/Technician (no-code) classes:

Murchison Community School, 414-2873 (Gwen). Fee = $3.00 plus cost of book.

Murchison is located west of Mopac on Far West Blvd., left on Hart Lane, and turn right at stop sign.

For more information, call Jeff, N5MNW, at 255-6753, or Roger Wines, W5WIA, at 453-2193.

Help is needed in teaching these classes and in giving on-the-air demonstrations. Please call Jeff at 255-6753 if you can help.

This schedule shows topics to be covered in each class session. It also provides reading for "homework" which should be done for each session following the first. The book for this course is "Now You're Talking", available at Austin Amateur Radio Supply or at most Radio Shack Stores in the area. Other books, such as Gordon West's are welcome, but class references will be from "Now You're Talking".

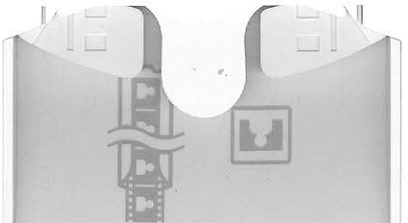
Class Session 1-- 22 March 1997 .....
Subjects: Introduction to Amateur Radio (videotape and demonstrations), radio spectrum and licensing, Technician license and privileges, FCC Rules & Regulations (Chapters 1 & 2). Read Chapter 3 for next week.

Class Session 2 -- 29 March 1997 .....
Subjects: Review of basic electronics (Chapter 3), the Metric System, series and parallel resistance, inductance, and capacitance. Study Chapters 3 and 4 for next week.

Class Session 3 -- 5 April 1997 .....
Subjects: Review of basic electronics (Chapter 3), circuit components (Chapter 4). Study Chapters 5 and 6 for next week.

Class Session 4 -- 12 April 1997 .....
Subjects: Practical circuits (Chapter 5), Selecting Equipment (Chapter 6). Study Chapter 7 for next session.

Belton Hamfest--Class Field Trip! -- 19 April 1997 .....
Convention Center in Belton which is just south of Temple, TX. Hamfest lasts from 8:00 am to about 1:00 pm. License testing may be available for those who are ready to take the test.



Class Session 5 -- 26 April 1997 .....
Subjects: Introduction to antennas, feedlines, and VSWR (Chapter 7). Study Chapter 8 and Chapter 9 to page 16 for next week.

Class Session 6 -- 3 May 1997 .....
Subjects: Safety, Home and mobile stations, Test equipment, Station accessories, Operating skills, FM & repeaters, Interference, (Chapters 8 and Chapter 9 to page 16). Study Chapter 9 page 17 to end and Chapter 10 for next week. (Those ready for the test may proceed upstairs for ARRL exams!)

Class Session 7 -- 10 May 1997 .....
Subjects: Packet and Radioteletype communications, propagation, spurious signals, Exam procedures (Chapter 9 p. 16 to end and Chapter 10). Review and relax!

Class Session 8 -- 17 May 1997 .....
Afternoon exam session at St. Edward's University at 2:00 pm. Bring with you a picture ID (i.e. driver's license/student card), one other form of identification, and exam fee which is $6.25. The next exams after this will be 7 June 1997 at 8:30 am at Murchison.

Calendar

February

2 Georgetown Swapfest
4 ARO Meeting @ Luby's, 7:30 pm
8 ARO Transmitter Hunt, 7:00 pm
11 AARC Meeting @ Luby's, 7:30 pm
15 Smithville Swapfest
15 QCWA Fellowship @ Luby's, 11.30 am
18 Austin Amateur TV Club @ Luby's, 7:30 pm
19 QCWA Business Meeting @ Luby's, 7:30 pm
24 CTDXCC Old Quarry Library, 7:00 pm

March

4 ARO Meeting @ Luby's, 7:30 pm
8 ARO Transmitter Hunt, 7:00 pm
11 AARC Meeting @ Luby's, 7:30 pm
15 QCWA Fellowship @ Luby's, 11:30 am
18 Austin Amateur TV Club @ Luby's, 7:30 pm
19 QCWA Meeting @ Luby's, 7:30 pm
22 Novice/No-code Technician classes begin, . See class announcement in this issue.

April

19 Belton Swapfest

Periodic Events

Sun	6:30 pm Travis ARES net	146.94 MHz
Sun	7:30 pm ARES Packet	145.73 MHz
Sun	8:00 pm 'williamson ARES	145.13 MHz
Sun	8:30 PM Travis ARES net	146.78 MHz
Sun	9:00 pm ARO Swapnet	146.94 MHz
Sun	(After Swapnet) Newsline	146.94 MHz
Thu	11:30-1:00 Lunch at Holiday House	
Sat	7:00-8:30 AM Breakfast at Waterloo Ice House, 8600 Burnet Road. Monitor 444.1 MHz	

Most Austin radio club meetings are held at Luby's Cafeteria on North Loop.

The Austin Repeater Organization (ARO) meets on the first tuesday of each month at Luby's at 7:30 pm.

The Austin Amateur Radio Club (AARC) meats on the second Tuesday of each month at Luby"s at 7:30 pm.

The Quarter Century Wireless Association (QCWA) holds its business meetings on the third wednesday of each month at Luby's at 7:30 pm. There is a fellowship meeting the third Saturday of each month at 11:30 am at Luby's.

The ARO transmitter hunt occurs at 7:00 pm on the saturday following the ARO meeting. The hunt frequency is 146.52 with coordination on 146.94. Projected dates are 2/8, 3/8, 4/5, 5/10, and 6/7.

The AARC sponsors ARRL VEC ham exams at 8:30 am on the first Saturday of each month at Murchison Middle School. Projected dates are 2/1, 3/1, 4/5, 5/3, 6/14* (*not a normal week), and 7/12. Contact joe Thiel, N5SMN.

ham exams will be held at 2:00 pm in Fleck Hall, Room 109, St. Edward's University, 3001 South Congress Avenue, on the third Saturday of each month. 327-6184. Projected dates are 2/22, 3/29, 4/19, 5/17, 6/21. Contact Jim Greenwood, AB5EK, 327-6184.

The ARO Swapnet is transmitted on Sunday at 9:00 pm on the 146.94 MHz repeater. Newsline, an amateur radio news program, follows the swapnet. The swaplist is copied to WB5GHJ's packet BBS shortly after the swapnet is over.

The Travis County ARES net meets every Sunday night at 6:30 pm on 146.94 MHz and 8:30 pm on 146.78 MHz. A packet session is held at 7:30 pm on 145.73 MHz (backup: 145.79 mHz) unconnect mode.

The Travis County RACES net meets on the third Sunday of each month following the 6:30 pm ARES net on the 146.94 MHz repeater.

Face-to-face meeting ARES meetings are held on the fifth Tuesday of months with a fifth Tuesday at 7:30 pm at Luby's Cafeteria on North Loop. Projected dates are 4/29, 7,29, 9/30, 12/30.

The Central Texas DX Contest Club (CTDXCC) meets at 7:00 pm at the Old Quarry Library off Far West Blvd. on the 4th Monday of each month. Projected dates are 2/24, 3/24, 4/28. 5/19* (* not normal week), 6/23, 7/28, 8/25. Contact: Ed Linde, K0GEX, 345-3627.

(Excerpts following are from The ARRL Letter, 3 January 1997, Vol 16, No. 1, American Radio Relay League)

North American Digital System Directory to be On-line:

With ARRL support, the Tucson Amateur Packet Radio Corporation (TAPR) now will provide information on digital systems that formerly appeared in the annual ARRL Repeater Directory. The digital directory information will be available at **http://www.tapr.org** directory. By not including digital system listings in the 1997-1998 edition of the Repeater Directory, the publication can better focus on its primary use as a guide to voice repeaters for traveling amateurs.

....

This new database will describe systems used by Amateur Radio stations involved in digital communications in United States, Canada, and Mexico. The Digital System Directory will be based on information provided by regional, state, and local organizations as well as by individuals, in a nearly real-time format. This should allow information to be maintained and updated more frequently than in a yearly publication. TAPR will also work with participating organizations to make this information available on TAPR's yearly CD-ROM as well as some future publication for local/regional groups to distribute.

The purpose of the Digital System Directory is not to manage, coordinate, or regulate the usage of digital systems, but [is] to provide the most up-to-date and accurate listing of digital systems that can be provided. Neither is it a formal organization, but [is] a mechanism to allow regional groups to provide and share information regarding digital systems.

The Digital System Directory is intended for use by individuals to further their enjoyment of the hobby and by organizations to help plan and develop digital networks.

...

For further information on the project and how to get involved, regional groups should check http://www.tapr.org/directory or send e-mail to Carl Estey at wa0cqg@tapr.org. --Jay Mabey, NU0X

ZIP Code Confusion:

Some hams filing vanity call sign applications have been using the incorrect AIP code to send applications or payments. If you're filing a paper Form 600V and enclosing payment, the correct ZIP Code is 15251-5924. Electronic (on-line) filers send their payments with Form 159 by mail using 15252-5994. --Bart Jahnke, W0JJ.

Club Insurance--the real deal:

We recently reported that Albert H. Wohlers & Co. of Park Ridge, Illinois--which administers the ARRL ham radio and club liability insurance plan--has raised the minimum premium for the ARRL Club Liability Insurance to $325 per year starting this year. While this represents an increase for most clubs, it will be a decrease for others--a fact our report did not make clear. It all depends on the state in which the club is located. According to information supplied by Wohlers, the minimum premium will go down in six states (the biggest drop was in Virginia where the minimum had been $366). For more information, contact Wohlers at 800-323-2106, FAX 847-803-4649; e-mail cusv@ahw.com.

(Excerpts following are from The ARRL Letter, 15 January 1997, Vol 16, No. 2, American Radio Relay League)

ARRL Membership Up in 1996!

The ARRL ended 1996 with its largest membership in history, by a very healthy margin. The grand total was 175,023--up 1,461 from the previous month as the result of a membership promotion mailed in November. This is an increase of 3,574--or approximately 2.1%--from a year earlier. ARRL Executive Vice President David Sumner, K1ZZ, called the statistics "not bad for the worst business year for Amateur Radio in recent memory." For purposes of comparison, in 1995 League membership showed a decline of about 0.6%.

Full Membership is up by even more--a bit more than 3.1%--reflecting the second year of the League's effort to identify Associate Members who have earned licenses and therefore are entitled to be Full Members. The figures that follow are based on total membership.

The Southeastern Division is now the largest ARRL Division, overtaking the Atlantic Division fro the first time. The Rocky Mountain Division posted the largest percentage increase for the fifth time in the past six years.--Dave Sumner, K1ZZ.

FCC Proposes Changes to Experimental Radio Service:

The FCC has proposed changes to the Commission's Experimental Radio Service (Part 5) Regulations (Notice of Proposed Rule Making in ET Docket 95-256). Among the suggested changes were longer license terms, blanket licensing of related multiple experiments by a single entity, and electronic filing of applications. The new rules also would encourage student experiments by issuing licenses to schools as well as to individual students, and by permitting use of additional frequencies.

Among other frequencies the proposed rules would change the 2450-MHz experimental band to 2402 to 2483.5 MHz and would add 10.0 to 10.5 GHz, raising the possibility that the Amateur Service and the student Experimental Service could end up sharing spectrum.

Ham Astronaut Aboard First Shuttle Flight of 1997:

NASA managers have set Sunday January 12, as the official launch date for the first shuttle mission of 1997. Aboard the shuttle Atlantis for the STS-81 mission--the fifth in a series of docking missions between the space shuttle and the Russian space station Mir--will be Jerry Linenger, KC5HBR. He'll replace US astronaut John Blaha, KC5TZQ, aboard MIR. Blaha has been on Mir since last September 19, and has been active on 2-meter FM during his mission, which included several successful MIREX contacts with students in late December and early January. Linenger will spend more that four months on Mir before returning to earth on space shuttle mission STS-84 in mid-May. The STS-81 mission will not carry the SAREX payload. It's not known if Linenger will be active on Amateur Radio, either from the shuttle or from Mir.

The STS-81 launch window opens at 0927 UTC and extends for about 10 minutes.The STS81 mission is scheduled to last just over 10 days. --NASA.

Mir Frequency Swap:

Astronaut John Blaha, KC5TZQ, has announced that, as of January 1, 1997, the 2-meter voice and packet frequencies for the Mir space station would change from 145.800-MHz uplink and 145.200-MHz downlink to 145.800-MHz downlink and 145.200-MHz uplink for ground stations. These frequencies are for both FM voice and packet operations.--AMSAT News Service.

STSPLUS Ver 9650 Available:

Dave Ransom has just released STSPLUS Ver 9650, shuttle and satellite-tracking software. The latest edition is primarily a features update that adds "night vision" capability where the screen is red for use on laptops outdoors (something teachers and Boy Scout troops have requested), and a new Location Map Mode which allows the user to specify the map center coordinates for the orthographic maps and "move around" and look at the maps, which some teachers have requested as a geography teaching tool. Version 9650 also fixes some bugs. The new version is available via anonymous FTP at ftp://ftp.mindspring.com/users/dransom. Suggestion and bug reports to Dave Ransom at rans7500@spaceling.msfc.nasa.gov. From The ARRL Letter 12/20/96.

Readers of this AARC/Over, ARO Monitor:

I want to thank Mickey McInnis [KB5YAC[for his help in preparing this issue. I also thank those who sent the many e-mail messages with enclosures that helped put interesting items on these pages. Thanks. We all should give Mickey special thanks. He has done a terrific job editing the newsletter before I volunteered for the job; now I appreciate how much effort that he as really expended for the benefit of AARC and ARO.

Lloyd Crawford, Editor